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Award Number: DAMD17-01-1-0193

TITLE: Soy and Tamoxifen for Breast Cancer Prevention in High  
Risk Pre-Menopausal Women

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REPORT DATE: October 2003

TYPE OF REPORT: Annual

PREPARED FOR: U.S. Army Medical Research and Materiel Command  
Fort Detrick, Maryland 21702-5012

DISTRIBUTION STATEMENT: Approved for Public Release;  
Distribution Unlimited

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20040206 121

| REPORT DOCUMENTATION PAGE   |   |  | Form Approved<br>OMB No. 074-0188                   |  |
|---|---|--|---|--|
| Public reporting burden for this collection of information is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing this collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden to Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503   |   |  |   |  |
| 1. AGENCY USE ONLY<br>(Leave blank)   |   | 2. REPORT DATE<br>October 2003                             |   | 3. REPORT TYPE AND DATES COVERED<br>Annual (17 Sep 2002 - 16 Sep 2003) |
| 4. TITLE AND SUBTITLE<br>Soy and Tamoxifen for Breast Cancer Prevention in High Risk Pre-Menopausal Women   |   |  | 5. FUNDING NUMBERS<br>DAMD17-01-1-0193              |  |
| 6. AUTHOR(S)<br>Jeffrey A. Tice, M.D.   |   |  |   |  |
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| 9. SPONSORING / MONITORING<br>AGENCY NAME(S) AND ADDRESS(ES)<br>U.S. Army Medical Research and Materiel Command<br>Fort Detrick, Maryland 21702-5012  |   |  | 10. SPONSORING / MONITORING<br>AGENCY REPORT NUMBER |  |
| 11. SUPPLEMENTARY NOTES   |   |  |   |  |
| 12a. DISTRIBUTION / AVAILABILITY STATEMENT<br>Approved for Public Release; Distribution Unlimited   |   |  |   | 12b. DISTRIBUTION CODE   |
| 13. ABSTRACT (Maximum 200 Words)<br>The current study is testing the feasibility and preliminary efficacy of soy supplementation to decrease risk of breast cancer by reducing breast density in individuals with $\geq 50\%$ breast density on mammography and who are at elevated risk for breast cancer. One hundred women will be randomized to either 25 g/day of soy protein or placebo (milk protein). The randomized placebo controlled design will allow for comparative toxicity and efficacy determinations using patient symptom scores and validated quality of life tools. Biological endpoints, including mammographic breast density, breast cytology, urinary estrogen metabolites, and blood serum biomarkers (IGF-1/IGF-BP 3), will be evaluated. Feasibility will be assessed by measuring the rate of recruitment, the percentage of women consuming at least 80% of the expected number of protein packets, and the dropout rate. Currently 14 women have been randomized and 7 more are scheduled to attend screening or randomization clinic visits in the next two months. |   |  |   |  |
| 14. SUBJECT TERMS<br>Soy isoflavones, breast cancer prevention, mammographic breast density, quality of life  |   |  |   | 15. NUMBER OF PAGES<br>5   |
|   |   |  |   | 16. PRICE CODE   |
| 17. SECURITY CLASSIFICATION<br>OF REPORT<br>Unclassified  | 18. SECURITY CLASSIFICATION<br>OF THIS PAGE<br>Unclassified | 19. SECURITY CLASSIFICATION<br>OF ABSTRACT<br>Unclassified | 20. LIMITATION OF ABSTRACT<br>Unlimited             |  |

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## **Introduction**

The PREVENT study is testing the feasibility and preliminary efficacy of soy supplementation to decrease risk of breast cancer in women who are at elevated risk for breast cancer based on the Gail model and have  $\geq 50\%$  breast density on mammography. One hundred women will be randomly assigned to 25 g/day of soy protein or a placebo (milk protein) for the 6-month study period. The randomized placebo controlled design allows for comparative toxicity and efficacy determinations using patient symptom scores, validated quality of life tools, and adverse event profiles. Biological endpoints, including changes in mammographic breast density, breast cytology, urinary estrogen metabolites, and blood serum biomarkers (IGF-1/IGF-BP 3, hormone levels) will be evaluated.

## **Accomplishments, Challenges and Future Goals**

Over the past year, recruitment has been the biggest challenge. During the first 2 months of recruitment, initial screening interviews were conducted with 41 women and of those more than half were found to not meet the study inclusion criteria. Of the 17 women who were found to be eligible, 14 stated they were not willing to join the study for various reasons. The majority of the eligible women who refused participation stated specifically that they did not want to risk random assignment to tamoxifen. Overall, the refusal rate of eligible women was approximately 90%. After careful review, it was decided that the refusal rate for the current study was unacceptable.

The study protocol was revised in the early part of this year primarily by dropping the tamoxifen arm of the study. Approval of the modified protocol was received from all necessary parties in the end of April 2003. The refusal rate for the study has dramatically decreased since the introduction of the revised protocol and as of September 2003 it is at 30%. Despite the increased interest in the study as a result of the deletion of the tamoxifen arm, timely recruitment of study participants is still a challenge. A new recruitment strategy was developed earlier this year in response to this challenge.

The San Francisco Mammography Registry (SFMR) is a database containing information on persons receiving mammograms at a variety of public and private health care institutions in San Francisco. In cooperation with the SFMR we developed a direct mailing, inviting women who meet basic eligibility criteria found in the SFMR database to participate in screening for the study. Use of the SFMR database allows us to recruit women from a wide range of ethnicities and socioeconomic backgrounds as the registry includes women seen at clinics primarily serving patients on Medicaid and the uninsured. We obtained separate IRB approvals from all institutions participating in the

collection of data for the SFMR before accessing the database and mailing letters to women. We mailed letters containing stamped refusal postcards to women in the SFMR who met our eligibility criteria and had expressly provided consent to be contacted about other studies on their SFMR questionnaire. Our first direct mailing took place in June of this year, with a second wave of letters mailed in August and plans for another set of letters to go out in the next month.

As a result of the modified protocol and targeted recruitment methods, accrual of study participants has been consistent over the quarter. Currently 14 women have been randomized in the study with another 7 women completing the screening process.

### **Key Research Accomplishments**

- Development and implementation of a direct mailing for recruitment of women from the San Francisco Mammography Registry
- 27 clinic Screening visits completed
- 14 randomization visits completed
- 7 3-month follow-up visits completed
- 2 close out (6-month) visit completed
- Data collected, reviewed for errors and entered into study database
- Data editing procedures completed for all data in the study database
- Biological samples (blood, urine, nipple aspirate and ductal lavage fluid) collected, processed and stored for later analysis

### **Reportable Outcomes**

There are no reportable outcomes at the time of this report. Samples will be tested at the end of the study in order to reduce inter-assay differences. A description of the activities performed over the last year and plans for the completion of the research goals in the upcoming year can be found in an earlier section of this report

### **Conclusions**

In the 6 months following approval of the revised protocol, we have implemented a new recruitment strategy and randomized 14 women. Four more randomizations are scheduled in the next month. All of our available appointment slots are filled and we continue active outreach to keep our recruitment on track. Data collection and editing are proceeding smoothly and archived specimens are ready for analysis. Once the first 10 participants have completed their closeout visit, we will send the first batch of specimens for laboratory analysis.